



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



January 8, 2004
Letter of Deficiency
DSP#04-006

Mr. Jim Law
US Army Corp of Engineers (USACOE)
New England Division
696 Virginia Road
Concord, MA 01742-2751

RE: Israel River Dam #131.03, Lancaster

Dear Mr. Law

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on August 6, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

Ownership of the dam is unclear;

2. The fish screens were plugged with debris and creating a buildup of sediment;
3. The concrete surfaces of the dam are severely cracked in several locations including the crest of the dam, the toe of the concrete slab on the right end of the dam and the far left upstream apron;
4. There is evidence that there has been movement of the stone gabions beneath the slab causing settlement cracking;
5. There was brush growing from the gabions on both the right and left abutments of the dam; and
6. There is no operation and maintenance plan (O&M) on file with the DES.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

January 31, 2004:

1. Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines;

October 1, 2004:

2. Remove the trees and shrubs growing from the gabions on both the right and left abutments of the dam;
3. Perform an underwater inspection, both upstream and downstream of the structure, to determine the extent of undermining beneath the concrete slab;

4. Repair the cracked and deteriorated concrete in the following locations;
 - a. On the spillway crest;
 - b. On the toe of the concrete slab on both the right and left downstream aprons
 - c. Other locations as determined by the underwater survey; and

On a continuing basis:

5. Maintain the sluiceways open and free of debris to allow for fish passage and sediment transport

OR

6. Pursue the option of dam removal. Consult with NHDES River Restoration Coordinator, Ms Stephanie Lindloff at (603)271-3406.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. Please call or write to our office if the repairs are completed before the aforementioned schedule. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

Sincerely,

COPY

Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13

cc: Gretchen Rule ✓

Town of Lancaster

Mark Stevens, Land Agent, NHDES

Stephanie Lindloff, River Restoration Coordinator, NHDES

Certified # 7000 1670 0000 0586 2718

GEL/was/h:/safety/wendy/lod/131-03lod.doc